

## Viking Grace first ship to install new Swedish heat recovery system

Environmentally advanced passenger vessel will install Climeon's unique "Ocean Marine" technology

A new European Union directive that takes effect on January 1, 2015 stipulates that for environmental reasons, oil used as vessel fuel may contain no more than 0.1 per cent sulphur. For many years, Viking Line has worked proactively to improve environmental performance in all of its vessels. One result is the Viking Grace, launched in 2013, which can operate entirely on sulphur-free liquefied natural gas (LNG). Now Viking Line is taking another important step towards environmental sustainability by signing an agreement with the Swedish-based company Climeon. The Viking Grace will be the first vessel in the world to install Climeon's patented system for recovering waste heat and turning it into electricity.

Climeon's product "Ocean Marine" is the world's most effective system for conversion of hot water into electricity. This product will help shipping companies to save money and fuel. At the same time, the environmental effect is very positive, says Thomas Öström, Climeon's CEO.

Viking Line is the first shipping company to order an "Ocean". Heat from the engines of the LNG-driven M/S Viking Grace will be converted by "Ocean" to more than 700,000 kWh of "free" electricity – the heat would otherwise be lost. Viking Line will save 200 tonnes of fuel per year.

"We investigated different alternatives and found that Climeon's 'Ocean Marine' is the best solution for us. This new technology will strengthen the Viking Grace's position as a market leader in environmental compliance," says Tony Öhman, Head of Marine Operations at Viking Line.

Climeon's patented technology converts waste heat to electricity through a vacuum process. This innovative system enables profitable generation of electricity. The marine version for Viking Line is the first product in a range of attractive applications of the technology.

"More than 50% of the energy used in the world ends up as useless waste heat. Interest from industry and society is overwhelming. We are pleased that 'Ocean' is a profitable solution for our customers, good for the environment and good for the development of Climeon," says Thomas Öström.

## CLIMEON – Ocean

*Efficient – Reliable – Compact*  
Everything included. Only connect hot & cold water



**VIKING LINE**

# Press release

November 27, 2014

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